

the Office Action of February 28, 2002 (Paper No. 25). In particular, the Examiner states that "the responses do not address the two 112, 1<sup>st</sup> rejections against claims 1 and 23 for lack of support in the originally filed application for the Markush groups found therein."

In rejecting claim 1, the Office Action (Paper No. 25) had stated that "[c]laim 1 comprises a new limitation wherein the at least two consensus sequences of the promoter library are defined in terms of a pair of Markush groups (one each for prokaryotic and eukaryotic cells)." See Office Action, page 4. In their responses, applicants amended the Markush group of claim 1. The amended Markush group of claim 1, in pertinent part, provides as follows: "when the selected organism or group of organisms is prokaryotic, being selected from the group consisting of TATAAT, TTGACA and an activator binding site upstream of the TATAAT sequence, when the selected organism or group of organisms is eukaryotic, being selected from the group consisting of a TATA-box and a UAS upstream of said TATA-box."

With regard to claim 23, the Office Action (Paper No. 25) stated that "[n]ew claim 23 comprises a Markush group consisting of several activator-binding sites upstream of the TATAAT sequence. There does not appear to be literal support in the specification for this Markush group." See Office Action, page 5. In their response, applicants amended claim 23. The amended Markush group of claim 23, in pertinent part, provides as follows: "a sequence selected from the group consisting of AGTT, TATTC, TG, TTGA, TTGG, and GTACTGTT." Further, in their remarks with regard to the claim amendment, applicants stated the following:

Basis for the claim amendments and newly added claims is found throughout the specification and specifically at page 7, line 37 to page 8, line 5 (for AGTT, TATTC, TG and GTACTGTT) and page 30, lines 18-27 (for TTGA and TTGG).

In the Notice, the Examiner states that "[a]pplicants may overcome the cited rejections by either deleting the specific limitations or by pointing to those parts of the

specification that provide support for the amended claim limitations. Thus, applicants respectfully direct the Examiner's attention to those portions of the specification which provide support for the Markush groups of claims 1 and 23.

With regard to the Markush group of claim 1, the specification states that "for prokaryotes said consensus sequences may for example comprise the -10 signal (-12 to -7): TATAAT and at least one activator protein binding site upstream . . . [m]ost often . . . the -35 signal (-35 to -30): TTGACA and the -10 signal (-12 to -7): TATAAT . . ." See specification, page 7, lines 17-28. The specification further states that "[i]n eukaryotic organisms said consensus sequences should comprise a TATA box and at least one upstream activation sequence (UAS)." See specification, page 8, lines 11-13.

With regard to the Markush group of claim 23, as noted above, support is found specifically at page 7, line 37 to page 8, line 5 (for AGTT, TATTC, TG and GTACTGTT) and page 30, lines 18-27 (for TTGA and TTGG). Specifically, at pages 7 to 8 the specification provides: "[t]he most efficient promoters are obtained when said consensus sequences further comprise intervening conserved motifs, e.g. selected from the conserved motifs -44 to -41: AGTT, -40 to -36: TATTC, -15 to -14: TG, and +1 to +8: GTACTGTT." At page 30, the specification provides "in the -35 region one often finds TTGR conserved (R=A or G) whereas the rest of the -35 consensus sequence is varying between different promoters." Moreover, Example 6 on page 31 provides an example of an oligonucleotide, in accordance with an implementation of the invention, that comprises the TTGR conserved sequence.

In view of the foregoing, even if the specification may lack literal support for the Markush groups themselves, the same claim directed to each individual embodiment (e.g., each of the terms in the Markush groups) would be supported by the specification. Thus, there is support in the original application for amended claims 1 and 23. Accordingly, applicants respectfully request that the Examiner withdrawal the rejection.

**REQUEST FOR ALLOWANCE**

For at least the reasons detailed above, the applicants respectively submit that they are fully responsive to the Examiner's Office Action. Further, applicants respectfully submit that all of the claims in the application are patentable. Favorable consideration, entry of this amendment, and issuance of a notice of allowance are respectively requested.

In the event any issues remain, the Examiner is encouraged to contact applicants' representatives to resolve such issues in an expeditious manner, and place the application in condition for allowance.

In the event any fees are incurred upon the filing of these documents, please charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

HUNTON & WILLIAMS

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